

For Release: NPE 2006 -- June 19, 2006 (BRO #8006)

Page 1 of 1

Brown Machine LLC, NPE 2006 News (Booth #S1409):

## **Brown Machine Announces New Servo Driven LS-Model Horizontal Trim Presses**

Beaverton, MI – Brown Machine LLC announces the addition of a servo driven LS-Model to their current line of T-Series line of horizontal trim presses. With the moving platen movement controlled through a servo drive, this press has the capability of slowing down for a controlled long ejection into product handling systems, speed up to make up the loop, and then maintain cycle time with the thermoformer. This press is available in models with sheet widths of 33", 53", 58", 68", and 74". A leading producer of cold and hot drink lids will take delivery of the first unit in June 2006.

Twenty-two inch (22") diameter drive sheaves replace the traditional thirty-two inch (32") diameter flywheels on the standard L-Model horizontal trim presses reducing the inertia by over 80%. This allows the drive to efficiently slow the press in one cycle to accomplish the ejection cycle, then quickly ramp back up in speed. In fact, the press has to run faster to make up the accumulated product from the slow down cycle before adjusting back to the production speed that maintains consistency with the thermoformer. A powerful Yaskawa servo motor and drive system replaces the variable frequency motor and drive. The servo system is not only required to control the speed profiles but must also provide the power to produce the tonnage lost by the flywheel inertia. The servo system is connected to the drive sheaves by multiple "C" belts for efficient transfer of power and control. By using the drive sheave concept, the press design maintains the ability of having multiple crank throw locations for 4.5", 7.5", 10.5" or 13.5" stroke selections.

As with the L-Model trim presses, platen movement is precisely guided with eight linear bearings on the moving platen, however the window to side load trim tools has been greatly expanded to 37" on LS-Models from 25" on standard L-Models. This opening offers side load capabilities to producers of cold and hot drink lids, food and berry box containers, horticulture

For Release: NPE 2006 -- June 19, 2006 (BRO #8006)

Page 2 of 2

containers and other products that traditionally have pre-punch straw slot, sip holes, vent slots or drain holes. The moving platen is also taller to support these progressive trim tools.

Designed principally for high speed trim applications, the press incorporates a new designed counterbalance system. The counterbalance platen is linear guided in a horizontal motion with four linear bearings positioned on the bottom of the platen. The motion is actuated via an eccentric from the main shaft that counteracts the motion and weight of the moving platen with trim tooling. Additional trim press frame supports are also added to the front of the press for stability. These features provide a smooth and stable trim press motion when operating at high speeds.

Standard models are controlled with a CTC Parker Human Machine Interface (HMI) that communicates with a Yaskawa machine control system. This machine control incorporates multi-axis motion control for the main drive, feed and eject servo systems, and PLC control for the remaining machine functions. As an option, Brown's new Series 4.0 Controls are available with the Operator Interface incorporating non-proprietary National Instruments Lookout software. Menu-based color displays provide ease of navigation and machine control throughout the HMI.

## Leaders in Trim Press technology

With both T-Series horizontal and V-Series vertical trim press configurations designed to meet your specific application, Brown offers the widest selection in trim press technology. In addition to this new servo driven LS-Model, Brown offers linear guide flywheel driven horizontal trim presses in our standard L-Models, along with LP and LDP Models incorporating extended stroke for deep draw products requiring progressive trim applications. Servo driven vertical trim presses can be used as either an intermediate trim press for pre-punch applications or as a perimeter trim press to trim, count, accumulate and transfer pre-counted stacks of products.

For Release: NPE 2006 -- June 19, 2006 (BRO #8006)

Page 3 of 3

## **Brown Machine at NPE 2006**

Brown Machine will be exhibiting at NPE 2006 at McCormick Place in Chicago, IL, June 19-23, 2006 at booth #S1409 and can answer your questions regarding trim press technology.

## **On Brown Machine LLC**

As a global leader of thermoforming technologies, Brown Machine LLC engineers and builds a complete standard line of continuous and cut-sheet thermoforming equipment and related tooling/peripheral equipment. Specialty thermoforming systems suited to a wide range of markets (including automotive, recreational, packaging, appliance and various other industrial segments) can be custom built to exact customer specifications. Brown Machine fully supports the thermoforming industry (Brown machine owners and competitive models, as well) with a full complement of 24/7/365 on-call service and parts support.

For more information contact Brown Machine, 330 North Ross Street, Beaverton, MI 48612, Phone: 989-435-7741, fax: 989-435-2821, [www.brown-machine.com](http://www.brown-machine.com).

###